Total Coliform Rule Data Reporting

Meeting Data Quality Objectives for Bacteriological Samples

Presented by:

Greg Rogers
Drinking Water Protection Team

August 2005



Coliform Organisms

E. coli...want some?





TCR Program

Elements of the Compliance Monitoring Process

- Sampling PWS or operator
- Data Reporting PWS/operator and Laboratory
- Compliance Determination TCEQ



TCR Sampling

- Samples required based on customers served
- Performed monthly (samples credited only to the month in which they are collected)
- Collect samples early in the month to allow time for corrective actions
- Systems collecting >5 samples/month should sample on multiple days



Sample Submittal Form

- Must be completed CORRECTLY to receive credit
- Accurate completion of the form is as important as actual sampling
- Improperly marked forms may be rejected by lab
- Monitoring Violations can result from errors



Data Quality Objectives

Requirements for VALID Sample Forms

- Complete all required information is submitted
- Accurate all information is correct



The Lab Submittal Form

Required Data Fields

- Sample Submitter (PWS info)
- Sample Collection Data (site / sampler / system type / sample type / water source / residual)
- Analysis Results (lab method / result / unsuitables)

Essential Information

- PWS Name must match TCEQ database (request name change in writing)
- ► PWS ID must be 7-digits and match Name
- System Type = PUBLIC
- Sample Type select only ONE
- Sample Site address or description (not 'system' or 'distribution')
- Sampler info name, phone w/ area code

Sample Types

Compliance Samples

- Distribution a routine monthly sample
- Repeat samples collected following a positive result (results used to determine if system or sample point is contaminated)
- Repeats collect within 24 hours of being informed of positive



Sample Types (cont.)

Not Usable for Compliance Purposes

- Special collected for diagnostic purposes (MCL, AMCL, BWN)
- Construction collected following repairs or installations
- Raw collected prior to disinfection, should not have a residual, must indicate TCEQ-assigned well number
- Depending on upcoming Groundwater Rule, Raws may be required for compliance

Completing the Lab Form

- Provide all essential info
- Check only ONE sample type
- Disinfectant Residual measurement (mandatory)
- Form must be legible
- Incorrectly prepared forms will be REJECTED for analysis - can result in a Monitoring Violation!



Unsuitable for Analysis

Rejected Samples

- Sample not within hold-time (>30 hrs)
- ► Inadequate volume need 100 mL
- Heavy silt / bacteria / turbidity
- Excess chlorine
- Error on lab form



Enforcement Actions for Total Coliform Rule (TCR) Violations

Presented by:

Sally Paramo
Drinking Water Protection Team

Public Drinking Water Conference
August 2005



TCR Program

Compliance Monitoring Requirements for PWS

- Routine monthly sampling
- Repeat sampling for positives
- Increased monitoring following positives (only for systems collecting <5 samples per month)
- Public notices for violations



Notice of Violations (NOV)

- Failure to collect all or part of required routine, repeat, or increased monitoring samples
- Maximum Contaminant Level (MCL)
- Acute MCL (AMCL)



Major Violations

- Acute MCL (TCR 21)
- ► MCL (TCR 22)

PWS fails to collect ALL required samples:

- Routine (TCR 23)
- Repeat (TCR 25)
- Increased Monitoring (T3)



Minor Violations

PWS Collects Partial Number of Required Samples

- Routine (TCR 24)
- Repeat (TCR 26)
- Increased Monitoring (T4)



Public Notice Requirements

PWS Must Inform Customers of Violations

- One-time posting in a local newspaper
- Insert a copy in billing statement
- Hand delivery
- Continuous posting



Public Notices

- Public Notice does not remove a violation
- Failure to issue Public Notice is a reporting violation
- Must be posted within required time frame for credit



Time Requirements

From Occurrence of Violation (30 TAC 290.122)

- Initial AMCL / Boil Water Notice (TV, Radio, Hand Delivery) - 24 hours
- Additional AMCL Public Notice 45 days
- MCL Public Notice 30 days
- Major/Minor Public Notices -90 days



Enforcement





Enforcement Criteria

In 12 Consecutive Months, PWS Incurs:

- 4 Major violations
- 1 MCL + 2 Major violations 4
 combined -MCL or Major repeat
 violations (monitoring or reporting)
- 6 combined MCL or Major
- 10 combined MCL or Major/Minor
- ► 1 AMCL + MCL or Major/Minor

Enforcement Action Referral (EAR)

- Compliance history database queried
- PWS w/ multiple violations flagged
- Notice of Enforcement sent to PWS (compliance record may be updated by providing missing data)
- If sufficient violations remain after update, EAR initiated



Enforcement Action

- TCR Program forwards EAR to TCEQ Office of Compliance and Enforcement (OCE)
- OCE staff reviews EAR and determines if fines will be levied
- PWS notified of monetary damages and possible negotiated payment schedule
- PWS may appeal findings

Need Assistance?

Sources for Information

- TCR Program (512) 239-4691
- Rules/Regulations for PWS (RG-195/346)
- Coliform Guidance Document (RG-421) NEW!
- **TCEQ** Publications (512) 239-0028